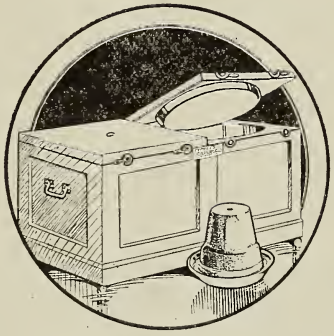
INEXPENSIVE WAYS
of
KEEPING FOOD COOL



Decay in foods is due to the growth of micro-organisms. These grow best at a temperature above 50° F.

Ice is commonly used for cooling foods but where it is scarce some other means must be devised.

This leaflet tells how ice can be used economically and how cold air, cold water, evaporating water, and heat-tight containers can be used to keep food cool.

The money saved by keeping food cool in these inexpensive ways may be made to earn more money for future use if it is well invested, as in War Savings Stamps.

Thrift Leaflet No. 14

·UNITED STATES·
DEPARTMENT OF AGRICULTURE & TREASURY DEPARTMENT

COOLING FOODS WITHOUT ICE

COLD AIR

In the ice chest food is chilled by artificially cold air; naturally cold air can also be used in many ways.

Window boxes. The most convenient kind fits on the window ledge close up to the window, preferably on the north side of the house. It should be made dust and fly proof and must allow for ventilation. Send for Farmers' Bulletin 375, which gives directions for making a simple window box.

Cellar air. The air in the cellar is cool and may be used for cooling foods, provided the cellar is clean, ventilated, and screened to keep out flies. Open windows and doors every day, or in very hot weather every night, to allow cool, fresh air to enter.

A north room in the cellar with well-insulated inside walls is good for general storage. A dumb waiter leading down from the pantry or kitchen adds to the convenience of a cellar storeroom.

A shaft made of wood or wood and plaster and extending from the cellar through the roof is another device utilizing the cool air of the cellar. This is particularly adapted to a cool, dry climate. Wire or perforated shelves are fitted into the shaft at convenient heights where it passes through the kitchen or pantry and here is also a door opening from the shaft. As the air in the upper part of the shaft grows warmer, the cool air from the cellar is drawn up; this constant upward movement of colder air cools the food on the shelves. Where there is no suitable cellar the shaft may open through the wall of the house just above the ground. Both ends of the shaft should be screened.

A cave dug in the side of a hill maintains a fairly low temperature. It should be lined with cement, brick, or some other dry, clean material; it should have a well-fitted door or possibly a double door; and it should have some means of ventilation.

WATER

Cold water. Food may be kept cool by placing the dish in cold water and changing the water as it becomes warm. In moderate weather such treatment keeps milk sweet and butter firm for a considerable time. Foods hot from the fire may be cooled in this way before they are put into the ice chest.

Evaporating water. Water as it evaporates absorbs heat. This fact is taken advantage of in keeping food cool by wrapping the dish in a cloth saturated with water and also in the iceless refrigerator. In cooling by the evaporation of water, the quicker the evaporation, the more heat absorbed and

the lower the temperature. Quick evaporation depends upon a good draft of dry air; in damp, muggy weather these devices do not work well. Farmers' Bulletin 927, Farm Home Conveniences, gives directions for making iceless refrigerators.

An unglazed earthenware flowerpot inverted in a dish of water makes a miniature iceless refrigerator, convenient where only small amounts of food need to be cooled. There are now on the market similar porous coolers specially adapted to cover a milk bottle. The unglazed earthenware water coolers used in some hot countries work on the same principle, cooling the water by evaporation through the pores in the earthenware.

A house or **box** built over a spring or brook is another contrivance for keeping foods cool.

A well may be used for cooling foods. If it is one used to supply drinking water great care must be taken not to let food fall into the water. An extra well may be used for the purpose.

HEAT-TIGHT CONTAINERS

Fireless cookers and vacuum jacketed bottles are well insulated and close tightly so that the temperature in them changes very slowly. They may be used for keeping foods cool as well as hot. Chill foods thoroughly before putting them into the containers. If a little ice is put into the well of a fireless cooker, the food will remain cool longer. Crushed ice also aids in chilling the contents of a vacuum jacketed bottle, it must be put in carefully to avoid cracking the fragile lining.

Send to the U. S. Treasury for Public Health Circular No. 102, which tells how to make a small insulated box for keeping the baby's milk, and to the U. S. Department of Agriculture for Farmers' Bulletin No. 927, which gives directions for making a fireless cooker.

HOW TO USE ICE THRIFTILY

Choose a well-made ice chest; it uses less ice than one of poor construction. It should keep a temperature of 50° F. or less. Test yours with a thermometer.

Keep the ice compartment well filled. This is economy in the long run.

Do not cover the ice with ice blankets, newspapers, or cloth. These prevent the ice melting, but make the ice chest less cool. Such coverings are desirable only when ice is very scarce or as a protection on the side of the ice exposed when the ice compartment is opened.

Do not keep foods in the ice compartment as the melting of the ice is increased every time the door is opened.

Do not open the ice chest doors unnecessarily. When one is opened, cold air rushes out and warm air rushes in. See that doors are closed tight after use, not left ajar.

Select fairly thin dishes for ice chest storage. Thick dishes take up and hold heat. Enameled ware and ordinary glass are better than heavy earthenware.

Never put warm food or warm dishes into the icebox.

Chill drinking water and such foods as butter, radishes, and olives by letting them stand in the ice chest rather than by serving them with chipped ice.

Keep the ice chest clean; wipe up anything spilled in it and when necessary wash it out with hot water, using 2 tablespoons washing soda to each gallon of water; rinse and dry thoroughly. Keep the drain pipe clean by flushing with hot water and cleaning with a long-handled brush. Such cleanliness does not prevent ice from melting; it does save food from spoiling.

In winter freeze your own ice in an old pan. Pouring hot water over the pan will loosen the cake. Snow may be used in the ice-cream freezer.

For other suggestions send to the U. S. Department of Agriculture, Washington, D. C., for free copies of

U. S. Thrift Leaflet No. 13, Saving Food by Proper Care.

Farmers' Bulletin No. 375, Care of Food in the Home.

Farmers' Bulletin No. 927, Farm Home Conveniences.